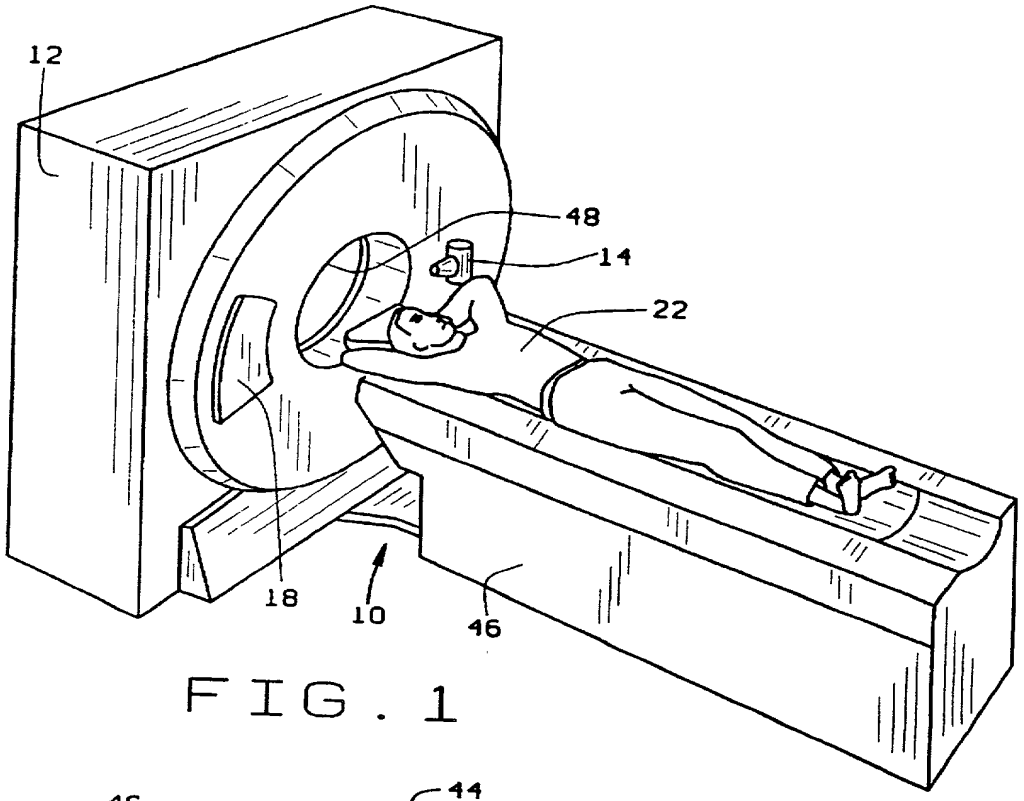

12
48
14
22
18
10
46

FIG. 1

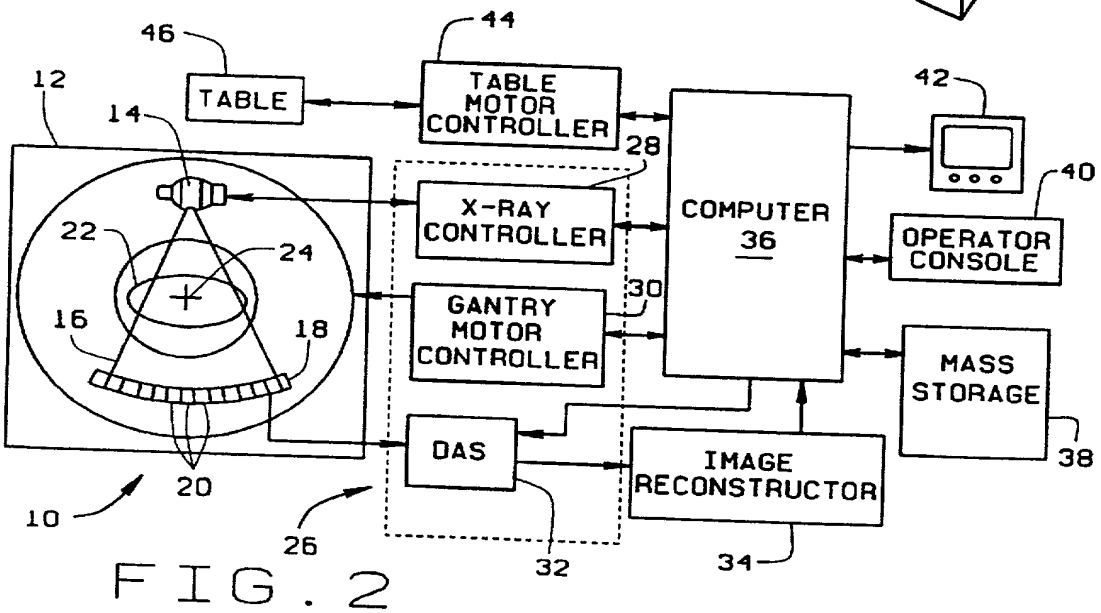

46
44
12
TABLE
TABLE MOTOR CONTROLLER
42
14
28
X-RAY CONTROLLER
COMPUTER 36
40
OPERATOR CONSOLE
22
24
16
18
GANTRY MOTOR CONTROLLER
30
MASS STORAGE
38
DAS
IMAGE RECONSTRUCTOR
10
20
26
32
34

FIG. 2

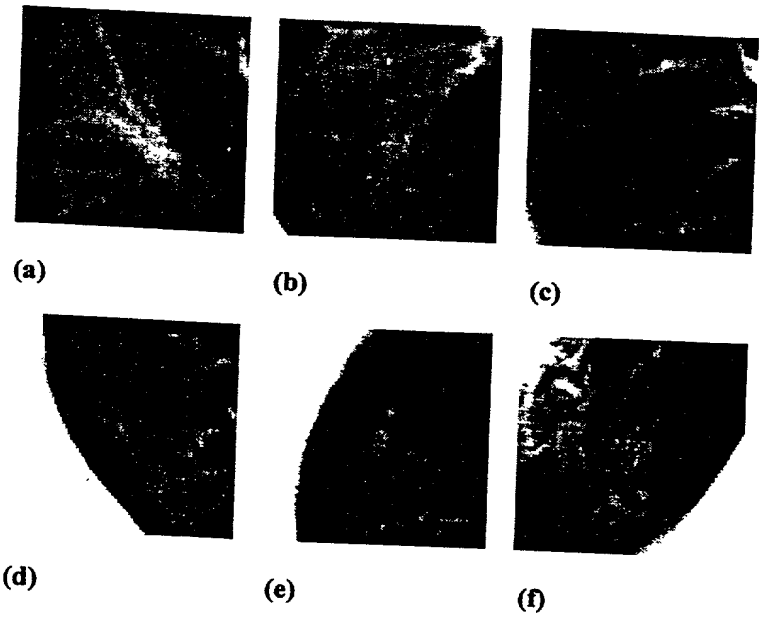



FIGURE 3

Fig. 3 Photograph

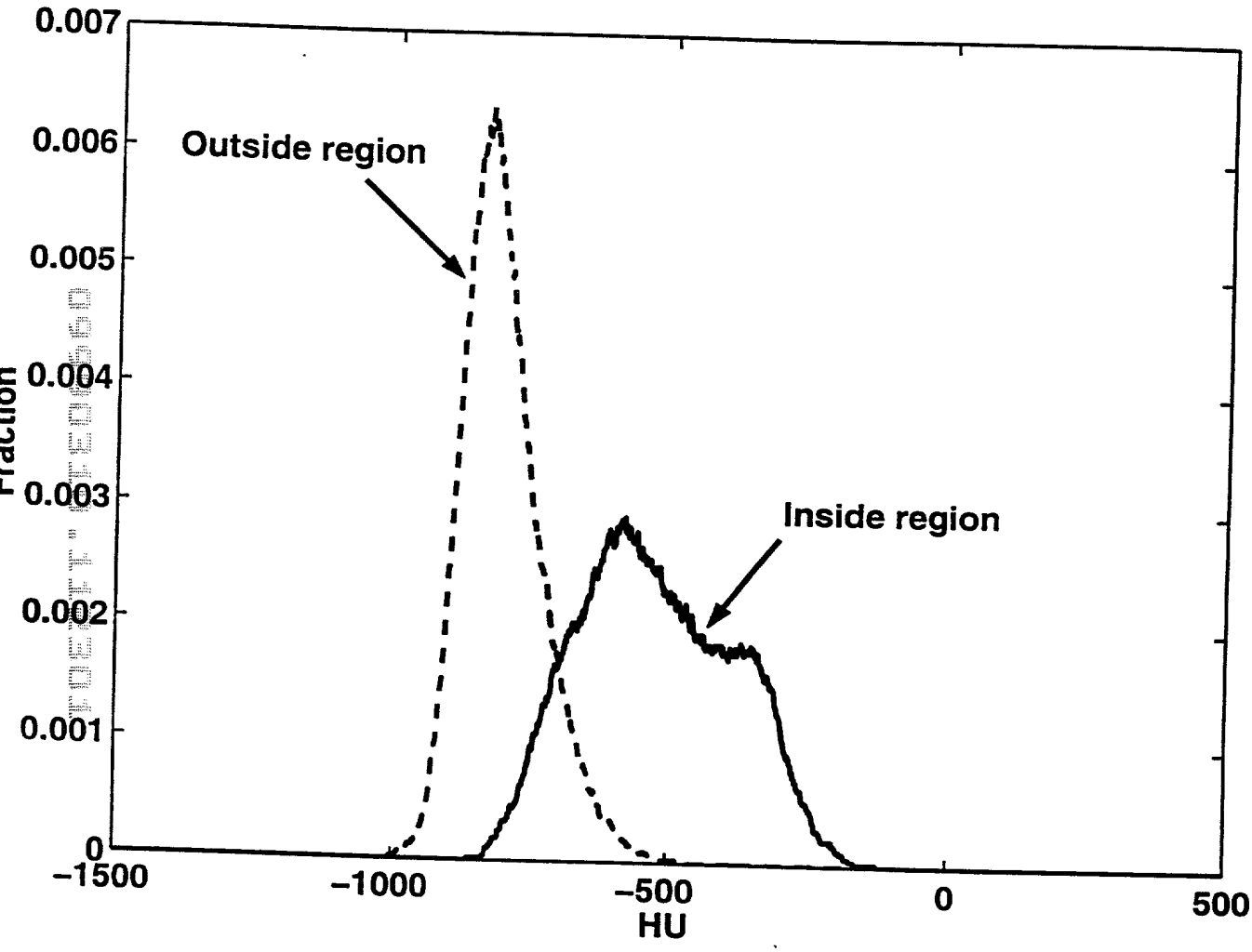

0.007
0.006
0.005
0.004
0.003
0.002
0.001
0
Fraction
Outside region
Inside region
−1500
−1000
−500
0
500
HU

FIGURE 4(a)

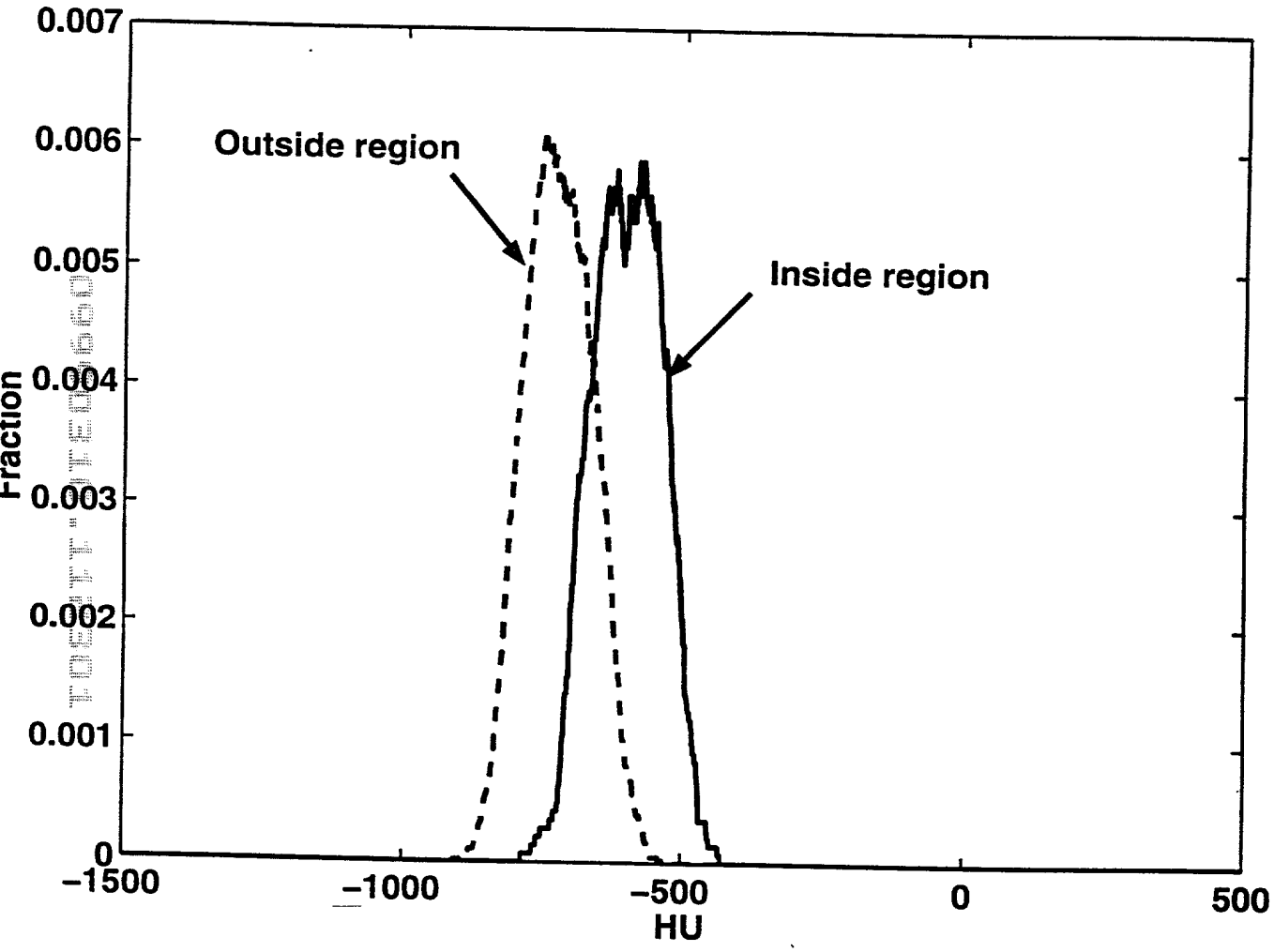

0.007
0.006
0.005
0.004
0.003
0.002
0.001
0
Fraction
Outside region
Inside region
−1500
−1000
−500
0
500
HU

FIGURE 4(b)

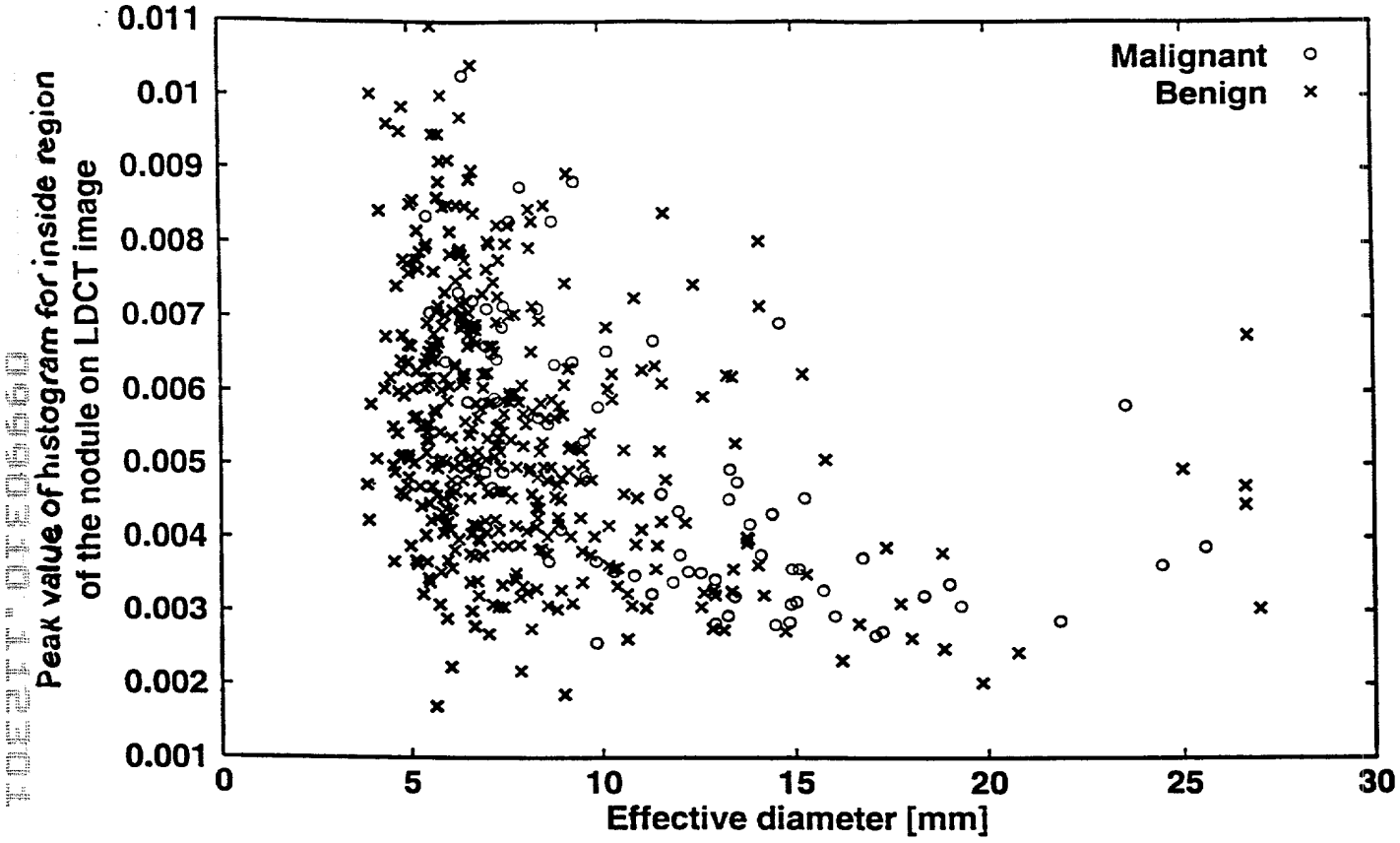

Peak value of histogram for inside region of the nodule on LDCT image
Effective diameter [mm]
Malignant
Benign
0.011
0.01
0.009
0.008
0.007
0.006
0.005
0.004
0.003
0.002
0.001
0
5
10
15
20
25
30

FIGURE 5

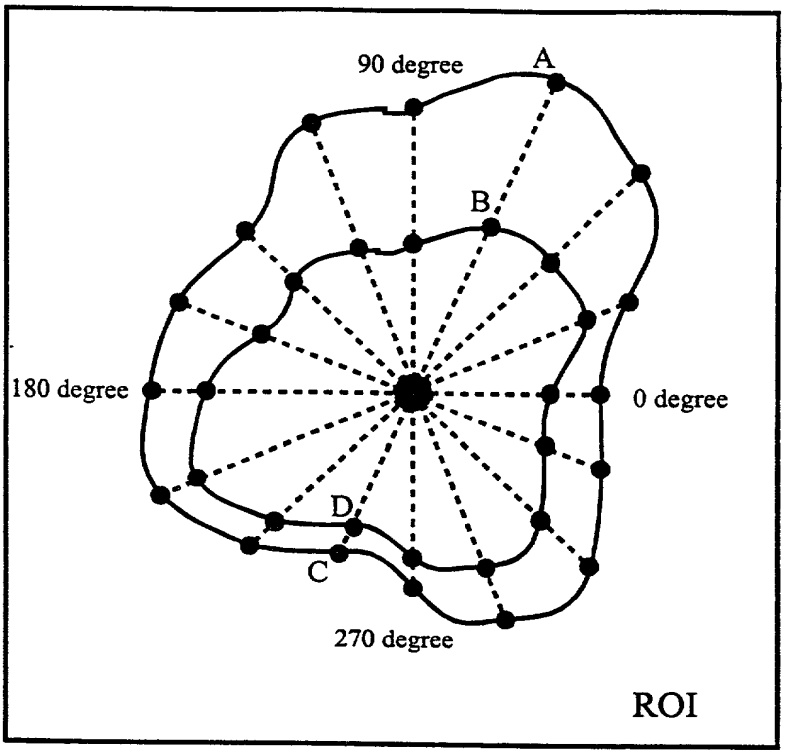
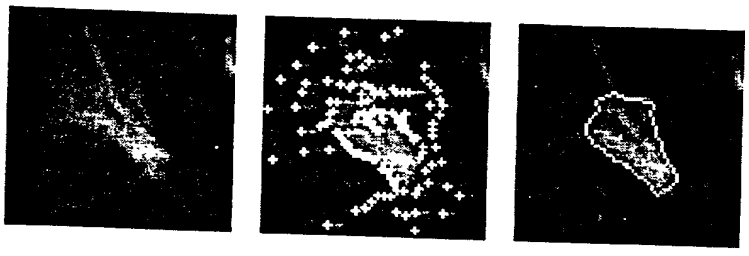



FIGURE 6



(a) (b) (c)

FIGURE 7

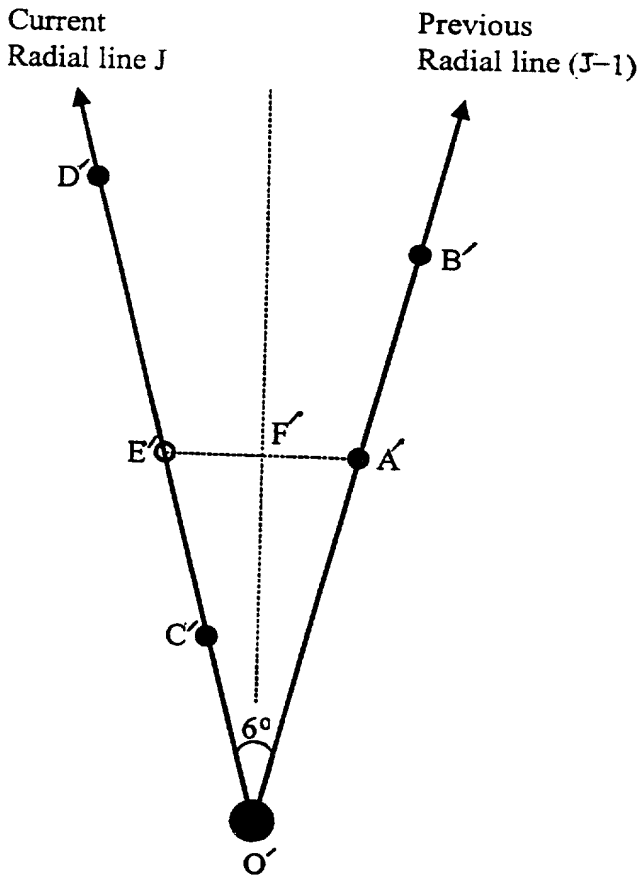



FIGURE 8

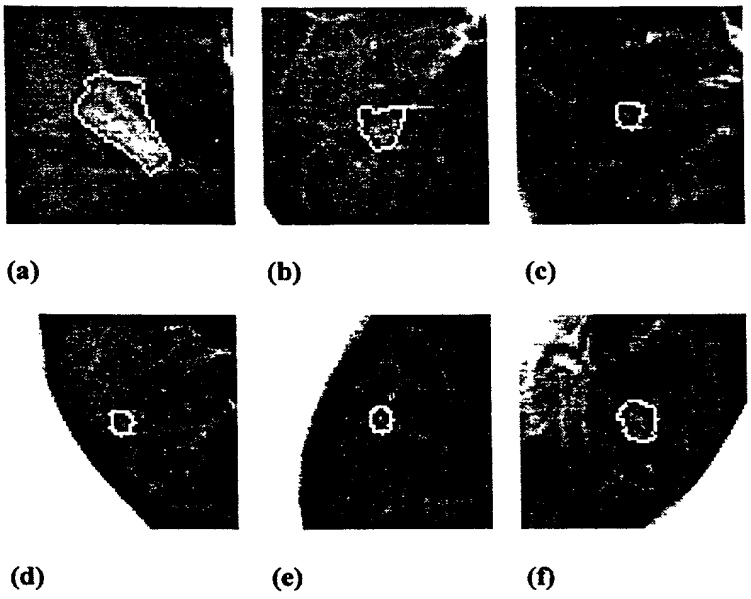



FIGURE 9

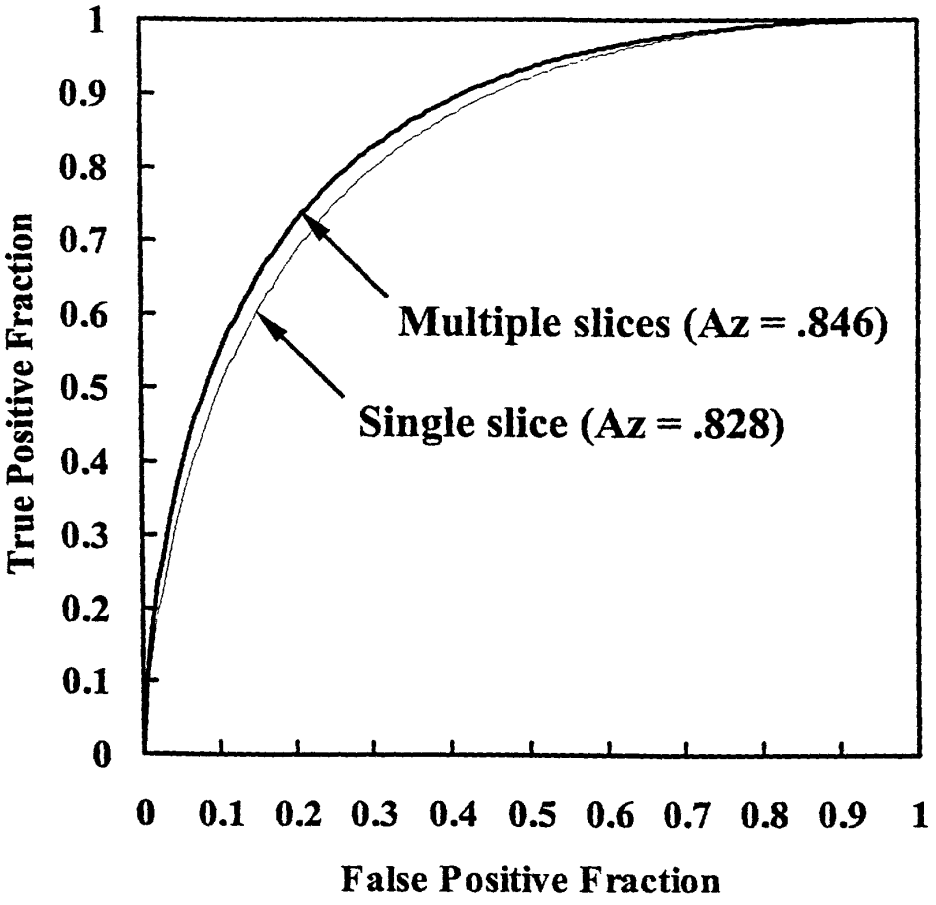

1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
True Positive Fraction
Multiple slices (Az = .846)
Single slice (Az = .828)
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
False Positive Fraction

FIGURE 10

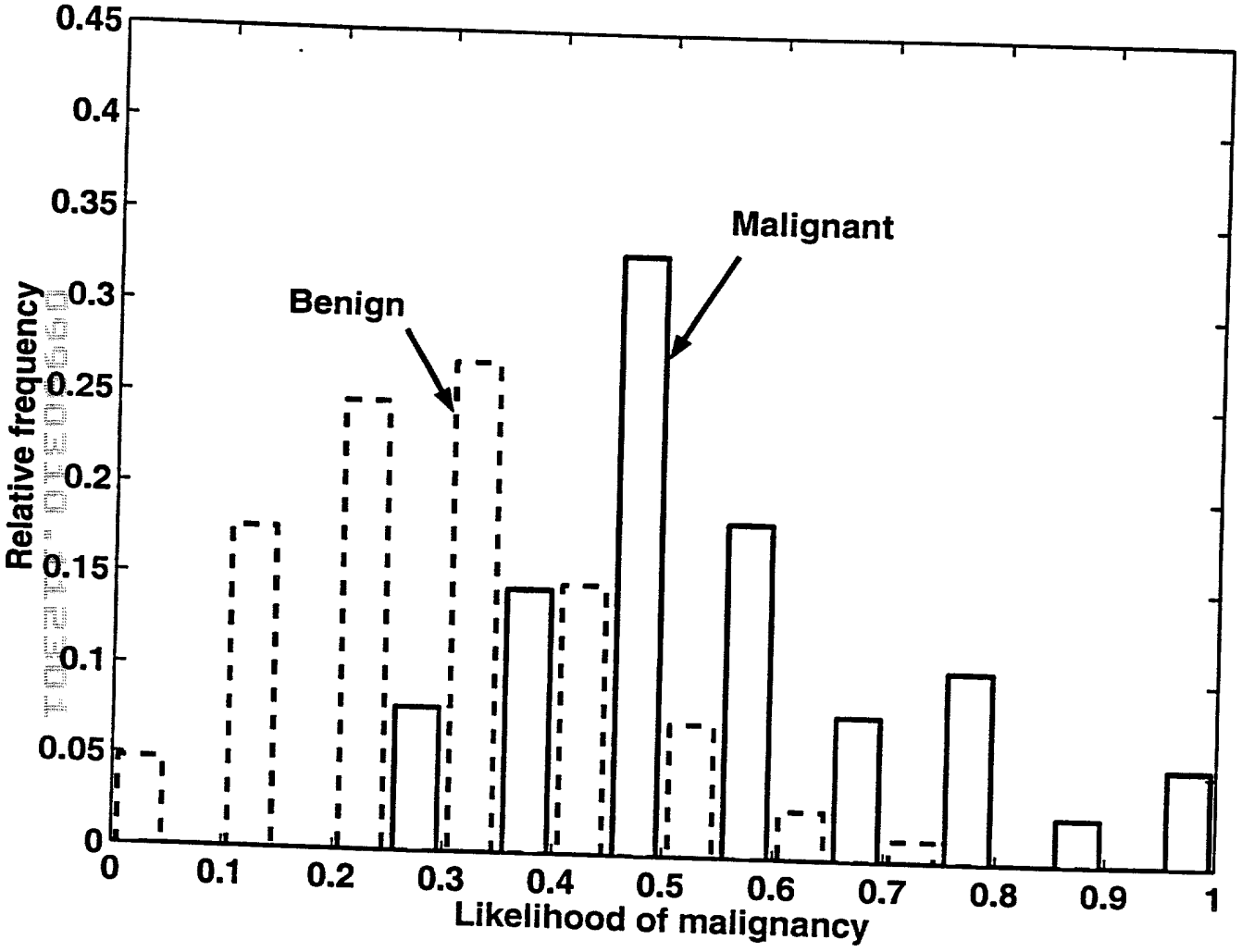

0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
Relative frequency
Benign
Malignant
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
Likelihood of malignancy

FIGURE 11(a)

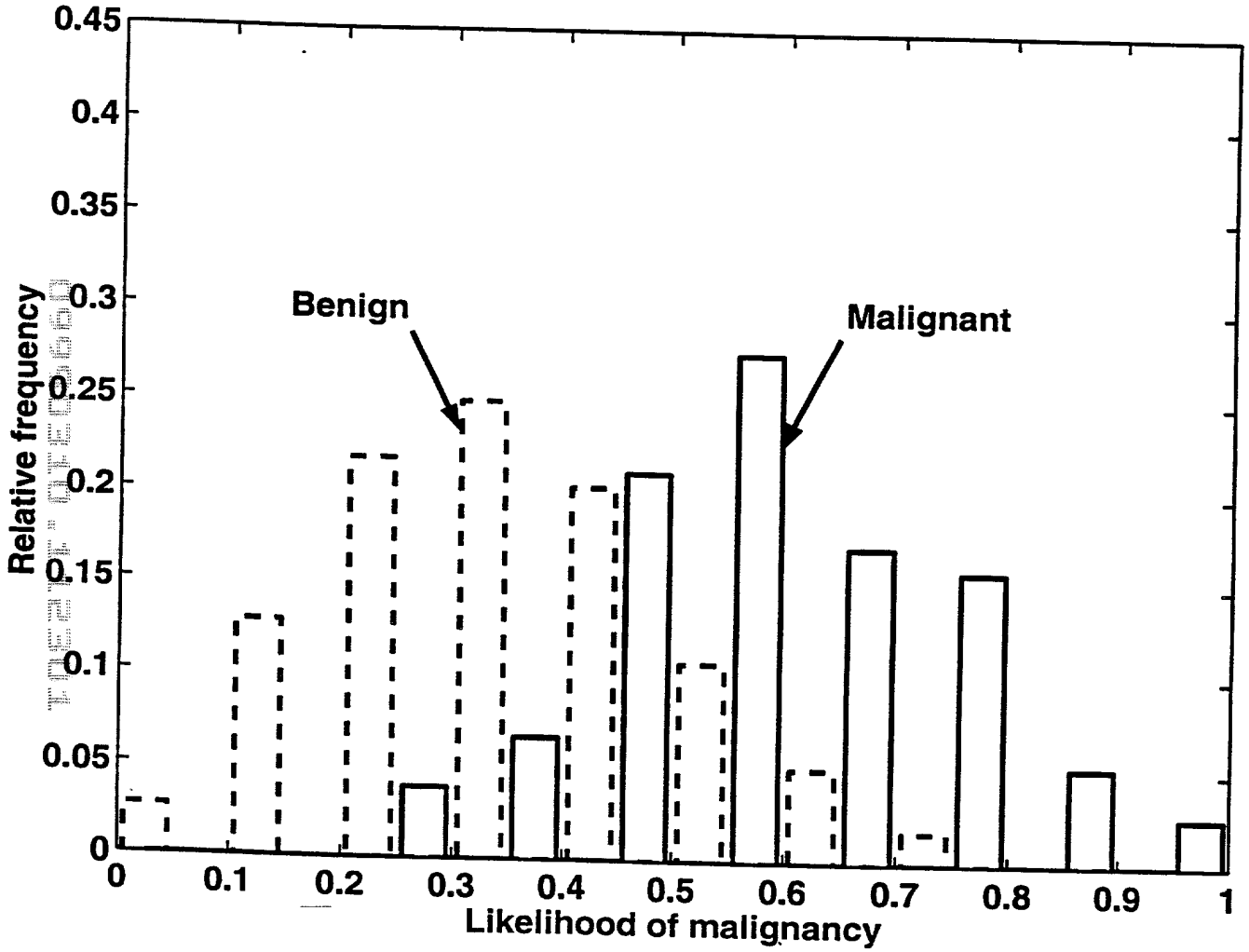

0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
Relative frequency
Benign
Malignant
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
Likelihood of malignancy

FIGURE 11(b)

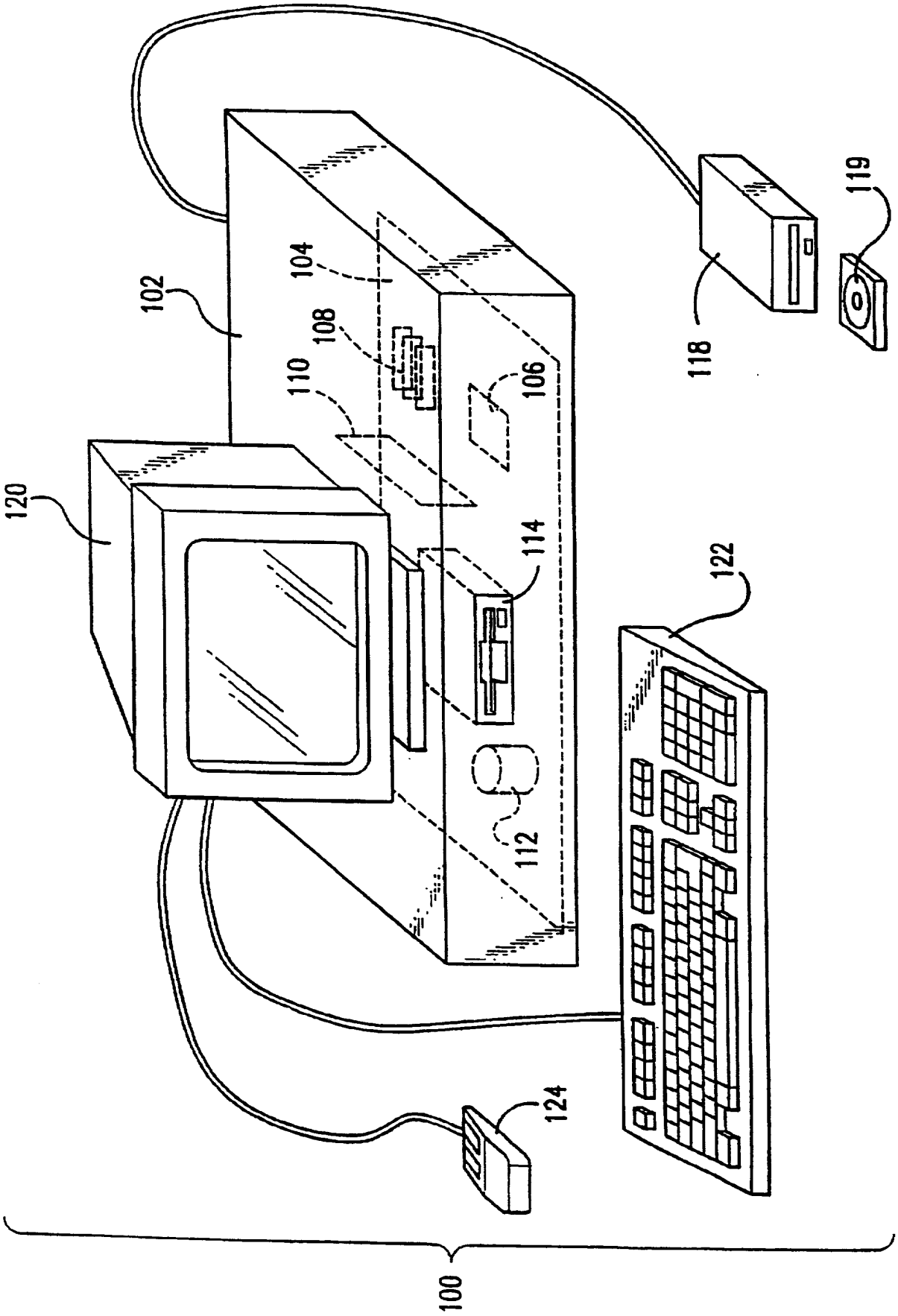



FIGURE 12